

**PATTERNS OF P-LACTAM ANTIBIOTIC RESISTANCE IN  
*Escherichia coli* ISOLATED FROM DAIRY FARMS IN  
SURABAYA**

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**ABSTRACT**

Milk is a good media for development of pathogenic bacteria that easily contaminated from environment. One species of bacteria widely studied is *Escherichia coli*. These bacteria are normally grow in the digestive tract. but in certain circumstances may be pathogens that cause gastrointestinal diseases both humans and animals with clinical symptoms of diarrhea. *Escherichia coli* infection performed an act of treatment with antibiotics, and the use antibiotics making a problem of bacterial resistance to antibiotics. The aim of this research was determine *Escherichia coli* contamination in *milk* and its antibiotic resistance pattern to  $\beta$ -lactam antibiotics. Milk samples were taken from milk cans belong to the farmers at Kaliwaron dairy's farm in Surabaya. 10 samples of milk can there were 5 positive samples contained *Escherichia coli* tested for 4 antibiotics that had been planted in the EMBA media and was confirmed by Indol test. These isolates were identified as *Escherichia coli* tested for antibiotic Ampicillin, Cefpodoxime, Aztreonam and Cefepime resistance by diffuse disc nietl-od. The isolates of *Escherichia coli* from Kaliwaron dairy were resistance to Ampicillin, Cefpodoxime, and Aztreonam.

**Key words :** *Escherichia coli*, Ampicillin, Cefpodoxime, Aztreonam, Cefepime